

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2000, Iowa

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Wood and Waste ^a	Other ^{a,f}	Net Interstate Flow of Electricity/Losses ^g	
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kerosene ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh		Other ^{a,f}	Million kWh	Total ^h	
1960	R 5,258	187	2,579	366	11,163	195	2,587	5,017	713	29,463	1,071	44	53,197	0	881	—	—	-2,370	—
1965	5,722	248	2,569	358	11,068	232	1,523	7,448	698	30,792	531	542	55,760	0	928	—	—	3,241	—
1970	6,166	349	2,914	256	13,677	725	490	11,038	700	35,701	401	627	66,528	0	935	—	—	1,618	—
1975	6,407	346	2,294	191	14,553	835	214	13,645	655	39,042	608	986	73,024	2,291	879	—	—	13,729	—
1980	12,340	270	1,699	184	15,930	813	171	11,167	714	35,394	415	5,236	71,721	2,563	946	—	—	13,041	—
1985	14,342	226	2,023	83	15,490	592	155	8,507	649	31,465	182	1,778	60,925	1,927	2,048	—	—	R 5,891	—
1990	R 17,929	218	1,537	99	15,223	891	81	6,355	731	31,684	126	937	57,663	3,012	R 1875	—	—	R 510	—
1991	R 18,905	233	1,563	82	14,605	892	51	7,255	654	32,471	96	676	58,346	4,147	R 901	—	—	R 2,162	—
1992	R 18,143	231	1,406	75	16,370	803	42	8,978	666	31,713	107	748	60,908	3,405	R 1,000	—	—	R 119	—
1993	R 19,328	248	1,354	70	16,970	720	71	15,651	679	32,703	164	756	69,139	3,235	R 747	—	—	R 1,449	—
1994	R 19,460	248	1,964	69	18,531	897	60	15,663	709	33,887	182	688	72,650	4,107	R 1,071	—	—	R 724	—
1995	R 20,728	262	1,636	72	18,879	1,046	69	16,989	697	34,418	94	640	74,540	3,730	R 1,003	—	—	R .857	—
1996	R 21,301	273	2,052	71	20,276	819	54	11,344	676	35,909	96	2,261	73,558	3,924	R 935	—	—	R 863	—
1997	R 21,847	255	2,623	78	20,553	793	63	10,296	715	35,577	73	2,425	73,197	4,149	R 909	—	—	R 1,224	—
1998	R 23,483	233	2,157	72	20,425	1,184	62	14,882	748	36,973	94	2,525	79,122	3,768	984	—	—	R -4,177	—
1999	R 23,590	231	2,942	81	19,479	885	72	18,746	756	36,993	120	2,624	82,698	3,640	988	—	—	R -5,103	—
2000	24,480	233	2,471	78	19,637	771	38	19,621	745	36,753	173	2,471	82,759	4,453	914	—	—	-21,859	—
Trillion Btu																			
1960	115.9	193.7	17.1	1.8	65.0	1.0	14.7	20.1	4.3	154.8	6.7	0.2	285.9	0.0	9.5	6.4	0.0	-8.1	603.3
1965	126.6	250.0	17.0	1.8	64.5	1.3	8.6	29.9	4.2	161.7	3.3	2.9	295.3	0.0	9.7	5.5	0.0	11.1	698.1
1970	130.9	351.8	19.3	1.3	79.7	4.1	2.8	41.7	4.2	187.5	2.5	3.3	346.4	0.0	9.8	6.3	0.0	5.5	850.7
1975	131.6	348.6	15.2	1.0	84.8	4.7	1.2	50.7	4.0	205.1	3.8	5.4	375.8	25.2	9.1	7.9	0.0	46.8	945.0
1980	234.4	270.4	11.3	0.9	92.8	4.6	1.0	41.0	4.3	185.9	2.6	28.7	373.1	28.0	9.8	50.8	0.0	44.5	1,011.0
1985	268.8	228.4	13.4	0.4	90.2	3.3	0.9	30.7	3.9	165.3	1.1	9.6	318.9	R 20.5	21.4	56.8	0.0	R 20.1	R 934.8
1990	R 331.7	219.7	10.2	0.5	88.7	5.0	0.5	23.0	4.4	166.4	0.8	5.1	304.6	R 31.9	R 19.1	R 15.2	R 0.1	R 1.7	R 914.0
1991	R 349.8	235.0	10.4	0.4	85.1	5.0	0.3	26.2	4.0	170.6	0.6	3.6	306.2	R 43.5	R 9.4	R 14.3	0.1	R -7.4	R 950.8
1992	R 329.8	231.9	9.3	0.4	95.4	4.5	0.2	32.5	4.0	166.6	0.7	4.0	317.7	R 35.7	10.3	R 14.1	0.1	R 0.4	R 939.9
1993	R 342.7	248.8	9.0	0.4	98.9	4.1	0.4	56.4	4.1	171.8	1.0	4.0	350.1	R 34.0	R 7.7	R 13.0	0.1	R 4.9	R 1,001.2
1994	R 349.5	250.3	13.0	0.3	107.9	5.1	0.3	56.9	4.3	177.2	1.1	3.7	370.0	R 42.9	R 11.0	R 16.6	0.2	R -2.5	R 1,038.2
1995	R 370.9	263.6	10.9	0.4	110.0	5.9	0.4	61.5	4.2	179.5	0.6	3.4	376.8	R 39.2	R 10.3	R 18.6	0.2	R -2.9	R 1,076.7
1996	R 383.5	274.3	13.6	0.4	118.1	4.6	0.3	41.0	4.1	187.3	0.6	12.1	382.1	R 41.2	9.7	R 19.5	0.2	R 2.9	R 1,113.5
1997	R 392.9	257.1	17.4	0.4	119.7	4.5	0.4	37.2	4.3	185.5	0.5	13.1	382.9	R 43.5	R 9.3	R 17.3	0.3	R 4.2	R 1,108.1
1998	R 420.0	235.2	14.3	0.4	119.0	6.7	0.4	53.8	4.5	192.7	0.6	13.6	405.9	R 39.5	R 10.0	R 15.4	0.3	R -14.3	R 1,112.1
1999	R 420.3	235.7	19.5	0.4	113.5	5.0	0.4	67.8	4.6	192.8	0.8	14.1	418.8	R 38.0	R 10.1	R 15.9	3.7	R -17.4	R 1,124.9
2000	445.9	234.0	16.4	0.4	114.4	4.4	0.2	70.8	4.5	191.5	1.1	13.2	416.8	46.4	9.3	16.2	5.4	-74.6	1,099.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

^f "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Section 5 of the Technical Notes for an explanation of estimation methodology.

^g Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates

that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

^h From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in the Technical Notes Table TN8) is included in the total but not in any other columns.

ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=Kilowatthours. R=Revised data. —=Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Energy Consumption Estimates, Selected Years, 1960-2000, Iowa

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar ^d	Electricity ^a	Electrical System Energy Losses ^e	Total	
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords	Geothermal	Solar ^d	Million Kilowatthours	Net Energy	Million Kilowatthours	
1960	R 537	58	2,610	2,301	3,312	8,223	163	—	—	3,720	—	9,253	—
1965	R 279	77	2,347	1,327	4,741	8,416	108	—	—	5,044	—	12,042	—
1970	R 100	96	2,232	325	6,826	9,383	99	—	—	6,480	—	15,703	—
1975	R 42	94	1,802	138	6,799	8,740	115	—	—	8,338	—	20,112	—
1980	R 19	85	2,388	47	3,890	6,325	620	—	—	10,038	—	24,409	—
1985	R 56	79	1,435	115	2,996	4,546	575	—	—	9,851	—	R 23,052	—
1990	R 44	71	797	24	2,742	3,563	348	—	—	10,513	—	R 22,934	—
1991	R 36	79	887	34	3,359	4,279	366	—	—	11,159	—	R 24,073	—
1992	R 11	75	779	20	3,401	4,199	385	—	—	10,290	—	R 21,807	—
1993	R 12	83	821	33	3,955	4,809	319	—	—	11,103	—	R 23,327	—
1994	R 6	78	973	19	3,925	4,917	313	—	—	11,062	—	R 22,926	—
1995	R 12	82	844	25	3,964	4,832	347	—	—	11,640	—	R 24,152	—
1996	R 27	88	785	30	5,321	6,135	347	—	—	11,537	—	R 23,955	—
1997	R 41	82	768	28	4,935	5,730	242	—	—	11,673	—	R 24,135	—
1998	R 31	69	542	25	4,178	4,745	R 219	—	—	11,855	—	R 24,342	—
1999	R 47	71	489	24	5,230	5,743	R 235	—	—	11,867	—	R 23,077	—
2000	29	74	474	27	5,308	5,809	246	—	—	12,029	—	20,624	—
Trillion Btu													
1960	R 11.4	60.5	15.2	13.0	13.3	41.5	3.3	0.0	0.0	12.7	R 129.4	31.6	R 161.0
1965	R 5.9	78.0	13.7	7.5	19.0	40.2	2.2	0.0	0.0	17.2	R 143.5	41.1	R 184.6
1970	R 2.0	97.1	13.0	1.8	25.8	40.6	2.0	0.0	0.0	22.1	R 163.9	53.6	R 217.4
1975	R 0.8	95.1	10.5	0.8	25.3	36.5	2.3	0.0	0.0	28.4	R 163.2	68.6	R 231.8
1980	R 0.4	85.2	13.9	0.3	14.3	28.5	12.4	0.0	0.0	34.2	R 160.7	83.3	R 244.0
1985	R 1.2	79.6	8.4	0.7	10.8	19.8	11.5	0.0	0.0	33.6	R 145.7	R 78.7	R 224.4
1990	R 1.1	71.9	4.6	0.1	9.9	14.7	7.0	f 0.1	f (s)	35.9	R f 130.6	R 78.3	R f 208.8
1991	R 0.9	79.4	5.2	0.2	12.1	17.5	7.3	0.1	(s)	38.1	R 143.3	R 82.1	R 225.4
1992	R 0.3	75.2	4.5	0.1	12.3	17.0	7.7	0.1	(s)	35.1	R 135.3	R 74.4	R 209.7
1993	R 0.3	83.7	4.8	0.2	14.3	19.2	6.4	0.1	(s)	37.9	R 147.5	R 79.6	R 227.1
1994	R 0.1	78.9	5.7	0.1	14.3	20.0	6.3	0.1	(s)	37.7	R 143.2	R 78.2	R 221.4
1995	R 0.3	82.6	4.9	0.1	14.4	19.4	6.9	0.1	(s)	39.7	R 149.1	R 82.4	R 231.5
1996	R 0.7	88.6	4.6	0.2	19.2	24.0	6.9	0.1	(s)	39.4	R 159.6	R 81.7	R 241.3
1997	R 1.0	82.4	4.5	0.2	17.8	22.5	4.8	0.1	(s)	39.8	R 150.7	R 82.3	R 233.0
1998	R 0.7	69.7	3.2	0.1	15.1	18.4	R 4.4	0.1	(s)	40.5	R 133.7	R 83.1	R 216.8
1999	R 1.1	72.8	2.8	0.1	18.9	21.9	R 4.7	0.1	(s)	40.5	R 141.1	R 78.7	R 219.9
2000	0.7	74.2	2.8	0.2	19.1	22.1	4.9	0.1	(s)	41.0	143.1	70.4	213.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Section 5 of the the Technical Notes for an explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for

electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

—=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Energy Consumption Estimates, Selected Years, 1960-2000, Iowa

Year	Coal ^a	Natural Gas ^b	Petroleum					Wood ^a	Electricity ^a	Electrical System Energy Losses ^d	Total ^e		
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels					Thousand Cords	Geothermal	Million Kilowatthours	Net Energy	Million Kilowatthours	
1960	R 373	28	1,046	94	584	178	232	2,135	3	—	1,812	—	4,506
1965	R 211	39	941	54	837	194	135	2,161	2	—	2,797	—	6,679
1970	R 78	57	895	13	1,205	271	65	2,449	2	—	3,655	—	8,857
1975	R 97	67	722	6	1,200	323	115	2,366	2	—	5,121	—	12,353
1980	R 71	51	751	5	686	350	79	1,871	15	—	5,502	—	13,379
1985	R 223	48	1,124	7	529	237	1	1,898	15	—	6,306	—	R 14,758
1990	R 201	44	495	38	484	142	31	1,190	R 23	—	7,532	—	R 16,430
1991	R 187	47	563	3	593	727	9	1,895	R 25	—	7,938	—	R 17,124
1992	R 53	46	488	4	600	645	37	1,775	R 26	—	7,783	—	R 16,494
1993	R 58	50	356	7	698	637	5	1,703	R 27	—	8,536	—	R 17,933
1994	R 34	48	391	13	693	35	1	1,132	R 27	—	8,753	—	R 18,142
1995	R 78	50	449	3	700	35	0	1,186	R 27	—	8,890	—	R 18,447
1996	R 195	55	361	4	939	244	1	1,549	R 29	—	8,673	—	R 18,009
1997	R 332	50	339	8	871	445	0	1,663	R 28	—	8,944	—	R 18,491
1998	R 249	43	456	3	737	470	1	1,667	27	—	9,384	—	R 19,268
1999	R 343	45	443	4	923	433	0	1,803	R 30	—	9,668	—	R 18,801
2000	232	46	473	6	937	533	3	1,953	30	—	9,932	—	17,030
Trillion Btu													
1960	R 8.0	28.8	6.1	0.5	2.3	0.9	1.5	11.4	0.1	0.0	6.2	R 54.4	15.4
1965	R 4.5	39.1	5.5	0.3	3.4	1.0	0.9	11.0	(s)	0.0	9.5	R 64.2	22.8
1970	R 1.6	57.8	5.2	0.1	4.6	1.4	0.4	11.7	(s)	0.0	12.5	R 83.6	30.2
1975	R 1.8	67.5	4.2	(s)	4.5	1.7	0.7	11.1	(s)	0.0	17.5	R 97.9	42.1
1980	R 1.4	50.7	4.4	(s)	2.5	1.8	0.5	9.3	0.3	0.0	18.8	R 80.5	45.6
1985	R 4.8	48.2	6.5	(s)	1.9	1.2	(s)	9.7	0.3	0.0	21.5	R 84.5	R 50.4
1990	R 4.8	44.3	2.9	0.2	1.8	0.7	0.2	5.8	R 0.5	f 0.0	25.7	f 81.0	R 56.1
1991	R 4.5	47.0	3.3	(s)	2.1	3.8	0.1	9.3	0.5	0.0	27.1	R 88.4	R 58.4
1992	R 1.3	46.3	2.8	(s)	2.2	3.4	0.2	8.7	0.5	0.0	26.6	R 83.3	R 56.3
1993	R 1.4	50.5	2.1	(s)	2.5	3.3	(s)	8.0	0.5	0.0	29.1	R 89.5	R 61.2
1994	R 0.8	48.3	2.3	0.1	2.5	0.2	(s)	5.1	0.5	0.1	29.9	R 84.7	R 61.9
1995	R 1.9	50.6	2.6	(s)	2.5	0.2	0.0	5.3	0.5	0.1	30.3	R 88.8	R 62.9
1996	R 4.8	54.9	2.1	(s)	3.4	1.3	(s)	6.8	0.6	0.1	29.6	R 96.8	R 61.4
1997	R 7.8	50.6	2.0	(s)	3.1	2.3	0.0	7.5	R 0.6	0.2	30.5	R 97.2	R 63.1
1998	R 5.9	43.5	2.7	(s)	2.7	2.4	(s)	7.8	0.5	0.2	32.0	R 90.0	R 65.7
1999	R 8.2	45.8	2.6	(s)	3.3	2.3	0.0	8.2	0.6	0.2	33.0	R 95.9	R 64.1
2000	6.1	45.8	2.8	(s)	3.4	2.8	(s)	9.0	0.6	0.2	33.9	95.6	58.1
Trillion Btu													

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

—=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Energy Consumption Estimates, Selected Years, 1960-2000, Iowa

Year	Coal ^a	Natural Gas ^b	Petroleum										Hydro-electric Power ^a	Wood and Waste ^a	Other ^{a,d}	Total	Million kWh	Electricity ^a	Net Energy	Electrical System Energy Losses ^f
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total	Million kWh								
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels										R g 18	Other ^{a,e}	Million kWh	Million kWh	Million kWh	Million kWh		
1960	2,193	43	2,579	5,536	192	1,098	196	5,797	573	44	16,016	2	—	—	2,676	—	6,657	—		
1965	2,464	68	2,569	5,607	142	1,815	218	5,373	354	542	16,620	2	—	—	3,719	—	8,879	—		
1970	1,955	99	2,914	5,884	152	2,949	220	5,391	261	627	18,398	1	—	—	5,338	—	12,936	—		
1975	1,333	121	2,294	4,670	70	5,593	155	3,791	279	986	17,838	1	—	—	6,626	—	15,984	—		
1980	1,505	115	1,699	4,698	119	6,557	192	2,612	273	5,236	21,385	1	—	—	9,318	—	22,658	—		
1985	1,572	87	2,023	4,788	33	4,893	175	1,703	179	1,778	15,571	1	—	—	9,520	—	R 22,278	—		
1990	2,353	90	1,537	4,137	19	3,087	196	1,072	9 95	937	11,080	R g 18	—	—	11,392	—	R 24,852	—		
1991	R 2,836	97	1,563	4,604	15	3,255	176	1,160	87	676	11,536	R 18	—	—	11,684	—	R 25,205	—		
1992	R 2,722	101	1,406	6,221	18	4,932	179	1,052	70	748	14,625	R 18	—	—	12,134	—	R 25,714	—		
1993	R 2,634	103	1,354	6,150	31	10,944	182	799	160	756	20,378	R 10	—	—	12,465	—	R 26,189	—		
1994	R 2,854	109	1,964	6,680	28	10,894	191	1,108	181	688	21,734	R 18	—	—	13,224	—	R 27,407	—		
1995	R 2,853	115	1,636	6,091	41	12,267	187	1,038	94	640	21,994	R 12	—	—	13,771	—	R 28,575	—		
1996	R 3,216	114	2,052	6,334	20	4,986	182	1,105	95	2,261	17,035	R 17	—	—	14,789	—	R 30,706	—		
1997	R 3,278	107	2,623	6,859	27	4,399	192	1,092	73	2,425	17,690	R 10	—	—	15,531	—	R 32,110	—		
1998	R 3,172	106	2,157	6,472	34	9,946	201	900	93	2,525	22,329	20	—	—	16,079	—	R 33,013	—		
1999	R 3,130	102	2,942	5,386	44	12,589	203	879	120	2,624	24,788	15	—	—	16,499	—	R 32,086	—		
2000	3,041	100	2,471	5,936	5	13,368	200	784	170	2,471	25,405	13	—	—	17,127	—	29,365	—		
Trillion Btu																				
1960	51.7	44.9	17.1	32.2	1.1	4.4	1.2	30.5	3.6	0.2	90.3	(s)	2.8	0.0	9.1	198.8	22.7	221.6		
1965	57.5	68.9	17.0	32.7	0.8	7.3	1.3	28.2	2.2	2.9	92.4	(s)	2.9	0.0	12.7	234.5	30.3	264.8		
1970	43.0	99.9	19.3	34.3	0.9	11.1	1.3	28.3	1.6	3.3	100.2	(s)	3.9	0.0	18.2	265.1	44.1	309.3		
1975	28.4	122.5	15.2	27.2	0.4	20.8	0.9	19.9	1.8	5.4	91.6	(s)	5.1	0.0	22.6	270.2	54.5	324.7		
1980	32.4	114.9	11.3	27.4	0.7	24.1	1.2	13.7	1.7	28.7	108.7	(s)	37.8	0.0	31.8	325.6	77.3	402.9		
1985	35.6	88.0	13.4	27.9	0.2	17.6	1.1	8.9	1.1	9.6	79.9	(s)	44.3	0.0	32.5	280.2	R 76.0	R 356.3		
1990	53.1	90.9	10.2	24.1	0.1	11.2	1.2	5.6	0.6	5.1	58.1	g 0.2	R 7.6	g 0.0	38.9	R 248.8	R 84.8	R 9 333.6		
1991	R 62.6	98.2	10.4	26.8	0.1	11.8	1.1	6.1	0.5	3.6	60.4	R 0.2	R 6.2	0.0	39.9	R 267.5	R 86.0	R 353.5		
1992	R 56.0	101.2	9.3	36.2	0.1	17.9	1.1	5.5	0.4	4.0	74.6	R 0.2	R 5.7	0.0	41.4	R 279.0	R 87.7	R 366.8		
1993	R 53.1	102.9	9.0	35.8	0.2	39.5	1.1	4.2	1.0	4.0	94.8	R 0.1	R 5.9	0.0	42.5	R 299.4	R 89.4	R 388.7		
1994	R 57.6	109.6	13.0	38.9	0.2	39.6	1.2	5.8	1.1	3.7	103.5	0.2	R 9.6	0.0	45.1	R 325.5	R 93.5	R 419.1		
1995	R 60.0	115.7	10.9	35.5	0.2	44.4	1.1	5.4	0.6	3.4	101.6	R 0.1	R 10.9	0.0	47.0	R 335.2	R 97.5	R 432.7		
1996	R 68.7	114.7	13.6	36.9	0.1	18.0	1.1	5.8	0.6	12.1	88.2	0.2	R 11.8	0.0	50.5	R 334.0	R 104.8	R 438.8		
1997	R 68.9	108.4	17.4	40.0	0.2	15.9	1.2	5.7	0.5	13.1	93.8	0.1	R 11.7	0.0	53.0	R 335.9	R 109.6	R 445.5		
1998	R 67.4	107.1	14.3	37.7	0.2	35.9	1.2	4.7	0.6	13.6	108.3	0.2	R 10.3	0.0	54.9	R 348.1	R 112.6	R 460.8		
1999	R 66.6	103.9	19.5	31.4	0.2	45.5	1.2	4.6	0.8	14.1	117.3	R 0.1	R 10.4	3.3	56.3	R 357.9	R 109.5	R 467.4		
2000	64.2	100.9	16.4	34.6	(s)	48.2	1.2	4.1	1.1	13.2	118.8	0.1	10.6	5.0	58.4	358.0	100.2	458.2		

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in Section 4 of the Technical Notes "Other Petroleum Products."

^e "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Section 5 of the Technical Notes for an explanation of estimation methodology.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for

electrical system energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

kWh=Kilowatthours. —=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Energy Consumption Estimates, Selected Years, 1960-2000, Iowa

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol ^d	Electricity ^a	Electrical System Energy Losses ^e	Total ^d	
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours	Net Energy	Million Kilowatthours	
1960	R 38	9	366	1,711	195	23	516	23,488	227	26,526	0	0	—	0	—
1965	8	11	358	1,991	232	55	480	25,224	15	28,354	0	0	—	0	—
1970	3	18	256	4,339	725	58	480	30,039	26	35,923	0	0	—	0	—
1975	(s)	16	191	6,851	835	53	501	34,929	0	43,359	0	0	—	0	—
1980	0	13	184	7,924	813	34	522	32,432	0	41,909	0	0	—	0	—
1985	0	10	83	8,042	592	90	475	29,525	0	38,807	f 820	0	—	0	—
1990	0	9	99	9,671	891	42	534	30,470	(s)	41,708	885	0	—	0	—
1991	0	7	82	8,442	892	49	478	30,584	0	40,528	1,102	0	—	0	—
1992	0	7	75	8,792	803	46	487	30,016	0	40,219	1,366	0	—	0	—
1993	0	7	70	9,521	720	54	496	31,266	0	42,128	1,611	0	—	0	—
1994	0	11	69	10,305	897	151	519	32,744	0	44,684	1,849	0	—	0	—
1995	0	11	72	11,349	1,046	58	510	33,345	0	46,380	1,811	0	—	0	—
1996	0	13	71	12,662	819	98	495	34,561	0	48,705	1,158	0	—	0	—
1997	0	11	78	12,377	793	91	522	34,040	0	47,901	1,410	0	—	0	—
1998	0	9	72	12,686	1,184	21	547	35,603	0	50,113	1,744	(s)	—	(s)	—
1999	0	8	81	12,862	885	4	553	35,681	0	50,065	1,888	(s)	—	(s)	—
2000	0	8	78	12,534	771	9	544	35,436	0	49,373	2,217	(s)	—	(s)	—
Trillion Btu															
1960	0.9	9.2	1.8	10.0	1.0	0.1	3.1	123.4	1.4	140.9	0.0	0.0	151.0	0.0	151.0
1965	0.2	11.2	1.8	11.6	1.3	0.2	2.9	132.5	0.1	150.4	0.0	0.0	R 161.8	0.0	R 161.8
1970	0.1	18.5	1.3	25.3	4.1	0.2	2.9	157.8	0.2	191.7	0.0	0.0	210.2	0.0	210.2
1975	(s)	16.2	1.0	39.9	4.7	0.2	3.0	183.5	0.0	232.3	0.0	0.0	248.5	0.0	248.5
1980	0.0	12.7	0.9	46.2	4.6	0.1	3.2	170.4	0.0	225.3	0.0	0.0	238.0	0.0	238.0
1985	0.0	10.5	0.4	46.8	3.3	0.3	2.9	155.1	0.0	208.9	f 2.9	0.0	f 219.3	0.0	f 219.3
1990	0.0	9.2	0.5	56.3	5.0	0.2	3.2	160.1	(s)	225.3	3.1	0.0	234.5	0.0	234.5
1991	0.0	6.7	0.4	49.2	5.0	0.2	2.9	160.7	0.0	218.3	3.9	0.0	225.0	0.0	225.0
1992	0.0	7.0	0.4	51.2	4.5	0.2	3.0	157.7	0.0	216.9	4.8	0.0	223.9	0.0	223.9
1993	0.0	7.4	0.4	55.5	4.1	0.2	3.0	164.2	0.0	227.3	5.7	0.0	234.7	0.0	234.7
1994	0.0	10.8	0.3	60.0	5.1	0.5	3.1	171.2	0.0	240.4	6.5	0.0	251.2	0.0	251.2
1995	0.0	11.1	0.4	66.1	5.9	0.2	3.1	173.9	0.0	249.6	6.4	0.0	260.7	0.0	260.7
1996	0.0	12.7	0.4	73.8	4.6	0.4	3.0	180.3	0.0	262.4	4.1	0.0	275.1	0.0	275.1
1997	0.0	11.4	0.4	72.1	4.5	0.3	3.2	177.4	0.0	257.9	5.0	0.0	269.3	0.0	269.3
1998	0.0	8.9	0.4	73.9	6.7	0.1	3.3	185.6	0.0	269.9	6.2	(s)	278.8	(s)	278.8
1999	0.0	7.9	0.4	74.9	5.0	(s)	3.4	185.9	0.0	269.6	6.7	(s)	277.5	(s)	277.5
2000	0.0	8.3	0.4	73.0	4.4	(s)	3.3	184.6	0.0	265.7	7.8	(s)	274.0	(s)	274.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for

electrical system energy losses.

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

—=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-2000, Iowa

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Wood and Waste	Geothermal Energy	Other ^{b,f}	Total ^g
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total						
	Year	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours				
1960	2,118	49	39	259	0	298	0	879	25	0	0	—
1965	2,760	52	27	183	0	210	0	926	30	0	0	—
1970	4,030	78	49	327	0	375	0	934	38	0	0	—
1975	4,936	47	214	507	0	722	2,291	877	40	0	0	—
1980	10,745	7	63	168	0	231	2,563	945	29	0	0	—
1985	12,491	2	2	101	0	103	1,927	2,047	60	0	0	—
1990	15,331	3	0	123	0	123	3,012	857	17	0	0	—
1991	15,846	4	0	109	0	109	4,147	883	20	0	0	—
1992	15,357	2	0	90	0	90	3,405	981	14	0	0	—
1993	16,623	4	0	122	0	122	3,235	737	20	0	0	—
1994	16,565	3	0	183	0	183	4,107	1,053	28	0	(s)	—
1995	17,785	4	0	148	0	148	3,730	991	20	0	(s)	—
1996	17,864	3	0	134	0	134	3,924	918	23	0	(s)	—
1997	18,194	4	0	211	0	211	4,149	899	22	0	(s)	—
1998	20,031	6	0	269	0	269	3,768	964	19	0	(s)	—
1999	20,071	5	0	299	0	299	3,640	974	20	0	2	—
2000	21,178	5	0	219	0	219	4,453	902	15	0	4	—
Trillion Btu												
1960	44.0	50.3	0.2	1.5	0.0	1.8	0.0	9.5	0.3	0.0	0.0	105.8
1965	58.6	52.8	0.2	1.1	0.0	1.2	0.0	9.7	0.3	0.0	0.0	122.6
1970	84.2	78.6	0.3	1.9	0.0	2.2	0.0	9.8	0.4	0.0	0.0	175.2
1975	100.6	47.3	1.3	3.0	0.0	4.3	25.2	9.1	0.4	0.0	0.0	187.0
1980	200.2	6.9	0.4	1.0	0.0	1.4	28.0	9.8	0.3	0.0	0.0	246.6
1985	227.3	2.1	(s)	0.6	0.0	0.6	R 20.5	21.4	0.6	0.0	0.0	R 272.5
1990	272.6	3.5	0.0	0.7	0.0	0.7	R 31.9	8.9	0.2	0.0	0.0	R 317.8
1991	281.8	3.7	0.0	0.6	0.0	0.6	R 43.5	9.2	0.2	0.0	0.0	R 339.0
1992	272.3	2.3	0.0	0.5	0.0	0.5	R 35.7	10.1	0.1	0.0	0.0	R 321.1
1993	287.9	4.3	0.0	0.7	0.0	0.7	R 34.0	7.6	0.2	0.0	0.0	R 334.7
1994	291.0	2.7	0.0	1.1	0.0	1.1	R 42.9	10.9	0.3	0.0	(s)	R 348.8
1995	308.7	3.6	0.0	0.9	0.0	0.9	R 39.2	10.2	0.2	0.0	(s)	R 362.8
1996	309.3	3.4	0.0	0.8	0.0	0.8	R 41.2	9.5	0.2	0.0	(s)	R 364.4
1997	315.2	4.1	0.0	1.2	0.0	1.2	R 43.5	R 9.2	0.2	0.0	(s)	R 374.2
1998	346.0	6.0	0.0	1.6	0.0	1.6	R 39.5	R 9.8	0.2	0.0	(s)	R 403.0
1999	344.5	5.3	0.0	1.7	0.0	1.7	R 38.0	R 10.0	0.2	0.0	(s)	R 399.6
2000	374.9	4.7	0.0	1.3	0.0	1.3	46.4	9.2	0.2	0.0	(s)	436.6

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.^f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.^g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in Table TN8 in the Technical Notes.

R=Revised data.

—=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.